This book is of an excellent standard, although some areas do read better than others. The chapter on vaporizers remains the highlight, but the discussions of pollution and of cleaning and sterilization are well-thought-out summaries of sensible advice. Some omissions are strange (e.g., the lack of information on double-lumen tubes), but the reader will seldom fail to find an adequate description of most of the equipment used. Although some of the figures are beginning to show their age, most are clear illustrations of their topic.

This book should be read by all anesthetists in training. It should be in all operating rooms and departments of anesthesia and in the offices of all those responsible for buying, repairing, cleaning or servicing any equipment used by anesthetists.

David R. Bevan, MB, MRCP, FFARCS Anesthetist-in-chief Royal Victoria Hospital Montreal, PQ

## Manipulative therapy

Manipulative Therapy in Rehabilitation of the Locomotor System. Karel Lewit. 388 pp. Illust. Butterworth & Co (Publishers) Ltd., London. 1985. \$79.95 (US). ISBN 0-407-00252-9

ne is not far into this book before realizing that it is a major work of profound significance. This classic text on manual medicine is an updated English version of the work of one of the most eminent manual practitioners in Europe. In the introduction Lewit notes that Hippocrates considered "rhachiotherapy" one of the cornerstones of medicine, on a par with surgery and drug therapy. Although it has persisted as the treatment of bonesetters and in folk medicine, the development of specific schools of manipulation is an American phenomenon of the late 19th century. One wonders whether the Europeans have managed to introduce manipulation into health care without the vitriolic exchanges that have greeted it on this side of the ocean. It is interesting that Lewit, a neurologist, champions the specialty of physical medicine and rehabilitation as the most appropriate discipline to make use of manipulation.

The 10 chapters are a comprehensive review of the status of manual therapy, including history, theory, functional anatomy and radiology, examination, indications, therapeutic techniques (including remedial exercise), clinical aspects, problems and the place of manipulative therapy. Specific diagnosis and treatment are clearly spelled out, in contrast to the widespread nonspecific manipulative practices, which bring manipulation into disrepute. Lewit discusses the idea of joint restriction (the European 'blockage'), or the osteopathic somatic dysfunction; he deals with the spine, the pelvis and the ioints of the extremities. The discussion of the pelvis and the sacroiliac joints could have been better done. Although the temporomandibular joint is included, this complex problem probably gets short shrift by the absence of any discussion of osteopathic craniosacral theory. Manipulation is dealt with in chapter 6, in terms of mobilization, isometric manipulation (Mitchell's muscle energy) and the more commonly recognized thrusting technique. Other adjunct treatments are considered under reflex therapy and include muscle relaxation, massage, acupuncture and electrical stimulation.

It is reassuring to see described the usual 2- to 3-day reaction to manipulation, something not usually discussed in other works. Manipulators use various treatment intervals; this book suggests a 2-week period between treatments, depending on clinical status.

An interesting point is raised in the section dealing with indications for treatment: the finding of joint restriction must be relevant to the patient's symptoms, whether as a primary cause or as a secondary problem super-

imposed on some other disorder or injury. The meaning of this statement is not as obvious as it seems at first: it takes some experience to appreciate the finding of joint restriction as a cause of symptoms that are often distal to the finding.

The section on contraindications could not be more concise and to the point. The discussion of poor results reflects the wisdom of a widely knowledgeable man.

Chapter 7 is a welcome discussion of the clinical presentations arising from dysfunction, or "blockage", at specific segments; it includes lumbar and pelvic syndromes, thoracic and cervical pain, headaches of cervical origin, root and entrapment syndromes, and pain in the extremities. The relation between musculoskeletal dysfunction and visceral disturbances should be particularly instructive to physicians given to labelling the cause as "functional" or "psychologic" when the pathologic features expected on the basis of the symptoms are not found.

The suggestion of prophylactic manipulation disturbs me. Although certain activities and professions entail recurrent problems (the athlete is mentioned specifically), I cannot think that manipulation would make any difference before a lesion is incurred.

The list of references appears to include almost every important name in manual medicine; it is a boon to anyone who has tried to use a medical library to search the literature on manipulation.

The book is clearly written, easy to follow and concise. It must be considered a standard reference for those who wish to be informed on what this treatment is all about. It belongs on the reference shelves of any practitioner of manual medicine who has achieved a degree of skill. It is not a book for the neophyte; it will not teach how to manipulate. Lewit's book is in my opinion a work of excellence.

Edward Day, MD, FRCPC Ste. 302, 150 Montreal Rd. Ottawa, Ont.